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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/802,321	03/17/2004	Stefan Bengt Edlund	LOT920030123US1_014	3735
51835	7590	02/10/2011		
IBM LOTUS & RATIONAL SW c/o GUERIN & RODRIGUEZ 5 MOUNT ROYAL AVENUE MOUNT ROYAL OFFICE PARK MARLBOROUGH, MA 01752			EXAMINER TIMBLIN, ROBERT M	
			ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/802,321	EDLUND ET AL.	
	Examiner	Art Unit	
	ROBERT TIMBLIN	2167	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 January 2011.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5, 7-16 and 18-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-16 and 18-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This Office Action corresponds to application 10/802,321, filed on 3/17/2004.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/20/2011 has been entered.

Response to Amendment

In the present amendment (dated 1/20/2011), Applicant therein amends claim 18 to overcome the previous objection. Examiner thanks Applicant for the corrective amendment and withdraws the objection.

No claims have been added or canceled; accordingly, claims 1-5, 7-16, and 18-20 are pending.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

Art Unit: 2167

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5, 7-11, 12, 13, 15, 16, and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Loveland (U.S. Patent Application 2003/0162555) in view of Leung et al. ('Leung' hereafter, U.S. Patent 7,092,977) and further in view of Cameron et al. ('Cameron' hereafter, U.S. Patent Application 2003/0172113).

With respect to claim 1, Loveland teaches A method for synchronizing a client having a client database with a server having a server database, the method comprising:

calculating at the server (0013, 0044, and 0056), for a plurality of clients (0039; e.g. a synchronization server that synchronizes with a number of wireless devices), a document score (0015; e.g. value of data is considered) for each document (0015; e.g. data) in a plurality of documents (0056; data items) in the server database (Fig. 2, server store 221), each document score designating an importance (0044; e.g. wherein important emails or contacts are determined and 0054; e.g. important information) relative to other documents (0044; e.g. emails from a particular sender may be of greater value to a user) of a respective one of the documents to a respective one of the clients (0058; e.g. information considered important of a mobile phone user) at one of the times (0059; e.g. account activity detected in the morning), each document score (0015; e.g. value of data) indicative of whether the document should be synchronized between the respective client and the server database (0013, 0015, and 0042; e.g.

Loveland teaches selection rules take into consideration the value of data in the determining whether a data item ought to be synchronized);

initiating a synchronization task at one of the clients (0047; e.g. the determination to synchronize is a user-issued instruction from the mobile device user), the synchronization task for updating documents in the client database to match documents in the server database (0006), the synchronization task specifying a threshold value that indicates the document score value for a document to be synchronized (0045; e.g. data items must have at least a predetermined value in order to be synchronized), and identifying the server and the server database for synchronization (0038);

a list of server documents produced based upon a comparison of the threshold value (0045) to the document scores (0056; e.g. the server determines which data items are appropriate to synchronize. Therein these items determined are interpreted as a “list”); and

Although Loveland teaches calculating a document score as determining the value of a data item and further at least calculating a document score for a time, Loveland does not appear to expressly teach calculating for a plurality of times, a document score.

Leung, however, teaches calculating for a plurality of times, a document score (col. 11 lines 53-67; e.g. data usage criteria information that specifies criteria related at least to a creation date, modification date, time of last access) for considering data usage information in determining placement of data.

Accordingly, in the same field of endeavor, (e.g. communicating data to a client), it would have been obvious to one of ordinary skill in the data processing art at the time

of the present invention to combine the teachings of the cited references because the usage information as taught by Leung would have given Loveland the ability to further determine a value of a document to be synchronized for the benefit of making the synchronization more user-friendly and efficient. Loveland discloses a need for such a teaching in paragraphs 0058-0059 wherein a user desires the latest information.

Loveland teaches determining which data items are appropriate to synchronize and user selection of data item to synchronize (0056) as documents produced based upon a comparison of the threshold (0045, 0049); however, Loveland and Leung do not appear to expressly teach sending the appropriate items (i.e. sending from the identified server and server database to the client) as a list and sending from the client to the identified server a fetch list based upon the list of server documents; transmitting one of the documents in the server database to the client based on a the fetch list.

Cameron, however, discloses sending from the identified server and server database to the client a list of server documents (0052 wherein a list of documents are added to a synchronization list on the server 102 and the list of synchronizable documents are provided to the small device) and sending from the client to the identified server a fetch list based upon the list of server documents (0052 wherein a user may select documents from the list to be synchronized); transmitting one of the documents in the server database to the client based on a the fetch list (0052, 0056; e.g. transferring the server document in a synchronization process) for providing a list of documents to be selected to synchronize.

In the same field of endeavor, (i.e. synchronizing), it would have been obvious to one of ordinary skill in the data processing art at the time of the present invention to

Art Unit: 2167

combine the teachings of the cited references because the teachings provided by Cameron would have given a user of Loveland and Leung the ability to freely choose documents to be sent for synchronization to their device. Loveland discloses the need when a user may manually select documents to synchronize (0056) and further wherein certain documents are to be synchronized with their device (0058-0060).

With respect to claim 2, Loveland teaches the method of claim 1 wherein the transmitting the step of sending comprises sending from the server to the client a list of server documents produced based upon a comparison of the threshold value to the document scores, wherein the list of server documents includes documents whose scores exceed the threshold value (0045).

With respect to claim 3, Loveland does not appear to teach the method of claim 2 further comprising determining the threshold value based on a data storage capacity of the client.

Leung, however, teaches determining the threshold value based on a data storage capacity of the client (col. 9 lines 25-30; e.g. storage capacity for a storage device) for allocating memory to a particular type.

Accordingly, in the same field of endeavor, (e.g. communicating data to a client), it would have been obvious to one of ordinary skill in the data processing art at the time of the present invention to combine the teachings of the cited references because the usage information as taught by Leung would have given Loveland the ability to efficiently utilize limited storage space (as suggested by use of a portable device).

With respect to claim 4, Loveland teaches the method of claim 1 wherein the calculating a document score for one of the documents is determined from at least one of a time of creation of the document, a number of times the document has been read, a time of last access of the document and an author of the document (0044; e.g. wherein senders of emails are interpreted as authors).

With respect to claim 5, Loveland teaches the method of claim 1 wherein the calculating a document score is determined from a relationship between the respective document and another of the documents in the server database (0044).

With respect to claim 7, Loveland and Leung do not appear to teach the method of claim 1 further comprising:

determining if the client database includes a newly created document; and transmitting the newly created document to the server.

Cameron, however, teaches determining if the client database includes a newly created document (0042; e.g. notification of changes); and

transmitting the newly created document to the server (0042; e.g. sending the entire document).

Accordingly, in the same field of endeavor, (i.e. synchronization), it would have been obvious to one of ordinary skill in the data processing art at the time of the present invention to combine the teachings of the cited references because the teachings of Cameron would have given Loveland and Leung the ability to effectively notify the

respective device (i.e. server or client) of changes for more efficiently synchronizing a document.

With respect to claim 8, Loveland teaches the method of claim 7 further comprising assigning a document score having a maximum value to the newly created document (0059).

With respect to claim 9, Loveland and Leung do not appear to teach the method of claim 1 further comprising:

determining if the client database includes a modified document; and transmitting the modified document to the server.

Cameron, however, teaches determining if the client database includes a modified document (0042; e.g. notification of changes); and

transmitting the modified document to the server (0042; e.g. sending the entire document).

Accordingly, In the same field of endeavor, (i.e. synchronization), it would have been obvious to one of ordinary skill in the data processing art at the time of the present invention to combine the teachings of the cited references because the teachings of Cameron would have given Loveland and Leung the ability to effectively notify the respective device (i.e. server or client) of changes for more efficiently synchronizing a document.

With respect to claim 10, The combination of Loveland and Leung and Cameron further teach the method of claim 9 further comprising assigning a document score having a maximum value to the modified document (Leung, col. 11 line 57-62).

With respect to claim 11, Loveland teaches the method of claim 1 wherein the client database includes a plurality of client documents (0037), the method further comprising designating for deletion one of the client documents based on a document score of a complementary document in the server database (0055).

With respect to claim 12, Loveland teaches the method of claim 1 wherein the client database includes a plurality of client documents, the method further comprising removing one of the client documents from the client database based on a document score of a complementary document in the server database (0055).

With respect to claim 13, Loveland and Leung do not appear to teach the method of claim 9 further comprising resolving a conflict between the modified document in the client database and a modified document in the server database.

Cameron, however, teaches resolving a conflict between the modified document in the client database and a modified document in the server database (0078 and 100) for resolving a conflict in a synchronization process.

Accordingly, in the same field of endeavor, (i.e. synchronization), it would have been obvious to one of ordinary skill in the data processing art at the time of the present invention to combine the teachings of the cited references because the teachings of

Art Unit: 2167

Cameron would have given Loveland and Leung the ability to resolve a conflict of changes for more efficiently synchronizing a document.

With respect to claim 15, Loveland teaches the method of claim 11 further comprising increasing a data storage capacity of the client by deleting the one of the client documents designated for deletion (0055 as erasure of a data item).

With respect to claim 16, Loveland teaches A computer program product for use with a computer system having a server with a server database, the server database storing a plurality of documents accessible to a client, the computer program product comprising a non-transitory computer useable medium having embodied therein program code (0026, 0034, therein Loveland teaches computer-executable instructions to carry out the following program code functions) comprising:

program code for calculating at the server (0013, 0044, and 0056), for a plurality of clients (0039; e.g. a synchronization server that synchronizes with a number of wireless devices), a document score (0015; e.g. value of data is considered) for each document (0015; e.g. data) in a plurality of documents (0056; data items) in the server database (Fig. 2, server store 221), each document score designating an importance (0044; e.g. wherein important emails or contacts are determined and 0054; e.g. important information) relative to other documents (0044; e.g. emails from a particular sender may be of greater value to a user) of a respective one of the documents to a respective one of the clients (0058; e.g. information considered important of a mobile phone user) at one of the times (0059; e.g. account activity detected in the morning),

Art Unit: 2167

each document score (0015; e.g. value of data) indicative of whether the document should be synchronized between the respective client and the server database (0013, 0015, and 0042; e.g. Loveland teaches selection rules take into consideration the value of data in the determining whether a data item ought to be synchronized);

program code for initiating a synchronization task at one of the clients (0047; e.g. the determination to synchronize is a user-issued instruction from the mobile device user), the synchronization task for updating documents in the client database to match documents in the server database (0006), the synchronization task specifying a threshold value that indicates the document score value for a document to be synchronized (0045; e.g. data items must have at least a predetermined value in order to be synchronized), and identifying the server and the server database for synchronization (0038);

a list of server documents produced based upon a comparison of the threshold value (0045) to the document scores (0056; e.g. the server determines which data items are appropriate to synchronize. Therein these items determined are interpreted as a “list”); and

Although Loveland teaches calculating a document score as determining the value of a data item and further at least calculating a document score for a time, Loveland does not appear to expressly teach calculating for a plurality of times, a document score.

Leung, however, teaches calculating for a plurality of times, a document score (col. 11 lines 53-67; e.g. data usage criteria information that specifies criteria related at

least to a creation date, modification date, time of last access) for considering data usage information in determining placement of data.

Accordingly, in the same field of endeavor, (e.g. communicating data to a client), it would have been obvious to one of ordinary skill in the data processing art at the time of the present invention to combine the teachings of the cited references because the usage information as taught by Leung would have given Loveland the ability to further determine a value of a document to be synchronized for the benefit of making the synchronization more user-friendly and efficient. Loveland discloses a need for such a teaching in paragraphs 0058-0059 wherein a user desires the latest information.

Loveland teaches determining which data items are appropriate to synchronize and user selection of data item to synchronize (0056) as documents produced based upon a comparison of the threshold (0045, 0049); however, Loveland and Leung do not appear to expressly teach program code for sending the appropriate items (i.e. sending from the identified server and server database to the client) as a list and program code for sending from the client to the identified server a fetch list based upon the list of server documents; program code for transmitting one of the documents in the server database to the client based on a the fetch list.

Cameron, however, discloses sending from the identified server and server database to the client a list of server documents (0052 wherein a list of documents are added to a synchronization list on the server 102 and the list of synchronizable documents are provided to the small device) and program code for sending from the client to the identified server a fetch list based upon the list of server documents (0052 wherein a user may select documents from the list to be synchronized); program code

for transmitting one of the documents in the server database to the client based on a the fetch list (0052, 0056; e.g. transferring the server document in a synchronization process) for providing a list of documents to be selected to synchronize.

In the same field of endeavor, (i.e. synchronizing), it would have been obvious to one of ordinary skill in the data processing art at the time of the present invention to combine the teachings of the cited references because the teachings provided by Cameron would have given a user of Loveland and Leung the ability to freely choose documents to be sent for synchronization to their device. Loveland discloses the need when a user may manually select documents to synchronize (0056) and further wherein certain documents are to be synchronized with their device (0058-0060).

With respect to claim 18, Loveland does not appear to expressly teach the computer program product of claim 17 wherein the determination of the threshold value is based on a data storage capacity of the client.

Leung, however, teaches determining the threshold value based on a data storage capacity of the client (col. 9 lines 25-30; e.g. storage capacity for a storage device) for allocating memory to a particular type.

Accordingly, in the same field of endeavor, (e.g. communicating data to a client), it would have been obvious to one of ordinary skill in the data processing art at the time of the present invention to combine the teachings of the cited references because the usage information as taught by Leung would have given Loveland the ability to efficiently utilize limited storage space (as suggested by use of a portable device).

With respect to claim 19, Loveland teaches the computer program product of claim 16 wherein the calculating a document score for one of the documents is determined from at least one of a time of creation of the document, a number of times the document has been read, a time of last access of the document and an author of the document (0044; e.g. wherein senders of emails are interpreted as authors).

With respect to claim 20, Loveland teaches the computer program product of claim 16 wherein the calculating a document score is determined from a relationship between the respective document and another of the documents in the server database (0044).

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Loveland, Leung, Cameron, and further in view of Roberts (U.S. Patent Application 2005/0065856).

With respect to claim 14, Loveland and Leung do not appear to teach the method of claim 11 further comprising removing the designation for deletion based on a document score of the complementary document in the server database.

Roberts, however, teaches removing the designation for deletion based on a document score of the complementary document in the server database (0053 and Fig. 6b) for unchecking items that are not to be deleted.

Accordingly, in the same field of endeavor, (i.e. server/client interaction), it would have been obvious to one of ordinary skill in the data processing art at the time of the

Art Unit: 2167

present invention to combine the teachings of the cited references because the teachings of Roberts would have given the user of Loveland and Leung the ability to keep documents from being deleted, thus providing a more user-friendly system.

Response to Arguments

Applicant's asserts on page 9 of the remarks that the teachings of Loveland are insufficient to teach or suggest the claimed step of "sending from the client to the identified server a fetch list based upon the list of server documents. Examiner submits that while it may be unclear and not expressly recited in Loveland how the determined appropriate items to synchronized are generated as a list and sent to a client in order for the client to send a fetch list to the server, this claimed step is made obvious in further view of Cameron.

Applicant argues on page 11 that Cameron does not teach the missing limitations. Examiner respectfully disagrees and submits that Cameron teaches sending from the identified server and server database to the client a list of server documents (0052 wherein a list of documents are added to a synchronization list on the server 102 and the list of synchronizable documents are provided to the small device) and sending from the client to the identified server a fetch list based upon the list of server documents (0052 wherein a user may select documents from the list to be synchronized); transmitting one of the documents in the server database to the client based on a the fetch list (0052, 0056; e.g. transferring the server document in a synchronization process) for providing a list of documents to be selected to synchronize.

Thus, in light of the above, Loveland determines appropriate items to synchronize, wherein the items are deemed appropriate based on, for example, their value or claimed document score. If the documents are found appropriate to synchronize, then they are seen to reach a threshold. Cameron is thus relied upon to transmit a list of these appropriate items (e.g. synchronizable documents) to a client so the client may select from this list to specify a list of documents to retrieve (e.g. "fetch") for synchronization. Therein, the list of specified documents can be interpreted as the claimed fetch list.

Accordingly, in light of the above, Examiner submits that the combination of cited prior art teaches the claims as presented.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ROBERT TIMBLIN whose telephone number is (571)272-5627. The examiner can normally be reached on M-Th 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R. Cottingham can be reached on 571-272-7079. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

Art Unit: 2167

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/ROBERT TIMBLIN/
Primary Examiner, Art Unit 2167